## **STAFF REPORT**

Meeting Date: 01/10/06 Agenda Item: 11

To: BEACON Board of Directors

From: Contracts Manager

Date 02/01/06

Subject: Coast of California Storm & Tidal Wave Study

# **REQUIRED ACTION:**

a. Authorize Executive Director to adopt a resolution authorizing BEACON to accept additional State funding in an amount up to \$200,000 from the Department of Boating and Waterways and approve an Amendment to the existing Grant Agreement between BEACON and the Department of Boating and Waterways.

## **DISCUSSION:**

The Army Corps of Engineer's Coast of California Storm & Tidal Wave Study (CCSTWS) program seeks to develop regional shore protection/sand management plans for the entire California coastline. The program is being implemented by region/county basis.

The purpose of the study is to gain a better understanding of the underlying coastal processes that govern the width of our beaches and the movement of sand along our coastline. The study does not focus on individual beach erosion problems and/or solutions. The scope of the study is set forth in the Project Master Plan (PMP) and includes a series of wave and coastal bathymetry measurements as well as an indepth assessment of local coastal processes. The overall cost of the study is \$2.78M, spread out over a four-year period. The primary benefits of the study will be a better understanding of our local coastal processes and beach erosion problems, an improved set of tools to predict future beach erosion patterns in our region, and a means for rapidly disseminating the information to interested government planning, engineering and regulatory agencies.

As the local sponsor, BEACON has signed a Feasibility Cost Sharing Agreement (FCSA) with the US Corps of Engineers. The FCSA stipulates that BEACON will be responsible for 50% of the cost of the study (\$1.39M), which can be made up of cash or in-kind services. The State can also contribute towards the local sponsor's share of the cost. This commitment is non-binding on either party, with the study being delayed if Federal and/or Local funds are not available.



A California Joint Powers Agency

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# BEACON BOARD OF DIRECTORS' MEETING ANNOUNCEMENT

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The State Department of Boating & Waterways (DB&W) has previously granted to BEACON \$650K to use to sponsor necessary studies as part of CCSTWS. BEACON is currently funding the following studies through the DBAW Grant Funds:

Study: Wave Study.

By: University of California San Diego Scripps Institute of Oceanography (Scripps).

Budget: Not to exceed amount of \$170,000.

Scope: The Coastal Data Information Program (CDIP) at Scripps Institution of

Oceanography has developed a measurement-based methodology to predict regional nearshore (nominally 8-10m depth) wave conditions along the California coastline. The wave prediction scheme uses a linear wave propagation model in combination with strategically placed deep water,

directional wave buoys. For this project the buoys will be placed so as to focus on sections of the Santa Barbara and Ventura County coastlines where the wave field is altered significantly by the reflection of north swells from Santa Cruz

Island

Study: Baseline Surveys.

By: United Sates Geologic Survey (USGS). Budget: Not to exceed amount of \$297,867.

Scope: Identify and quantify the pathways for nearshore sediment transport in Santa

Barbara and Ventura Counties, with emphasis on critical regions of shoreline erosion. Conduct a regional study of the Santa Barbara-Ventura County coast, complemented with several localized studies in areas of critical interest. Work will be conducted with both state-of-the-art field and numerical modeling

techniques.

Study: Lidar Surveys.

By: Texas Bureau of Economic Geology. Budget: Not to exceed amount of \$72,179.

Scope: Aerial digital topography of shoreline from bluffs to mean low tide. The limits

of the surveys are from Point Conception to Point Magu. Completion of this work will allow the development of digital terrain mapping (DTM) and base

mapping for GIS.

The Department of Boating and Waterways is now prepared to grant additional funding to BEACON in an amount up to \$200,000. These funds will contribute to Phase II of the Baseline Survey work with USGA. It is expected that the Department of Boating and Waterways will be able to determine the exact grant amendment amount by the end of February 2006.

Staff requests that the Board authorize the Executive Director, at such time that the Department of Boating and Waterways determines the exact amount of the additional grant funding, to adopt a resolution to accept the additional funding and approve an Amendment to the existing Grant Agreement between BEACON and the Department of Boating and Waterways.